Modification history PyRefra

10/02/2025	Correction storing SEG2 format files
30/01/2025	Correction reading file receivers.geo for 3C geophones
27/11/2024	Restructure files for relative package import and for installation with pip, upload wheel to PyPi; Modify manual correspondingly. Change version numbering to yy.mm.version_of_month (yy = year, mm=month)
03/08/2024	Add checkerboard test
08/06/2024	Add MAC installation in manual, check existence of pyGIMLi
06/06/2024	Correct function name when leaving ampPick.
04/06/2024	Introduce work-around for non-standard SEG2 files (no receiver station number nor channel number, variable trace lengths)
29/05/2024	Add option to store data for use with ShaVi FWI
02/05/2024	Avoid showing empty receiver gathers for receivers that were muted through file receiver-corrections.dat
28/04/2024	Correct errors in clipping of inversion model plot in presence of topography. Correct in file gather plot.
24/04/2024	Pygimli works now also under Python 3.11, therefore it is no longer necessary to install a specific environment. The manual has been modified in this sense. Modify refraPlot.py code to conform better to Python standards.
19/04/2024	Correct errors in changeUnc and originalScreen, modify refraData.py code to conform better to Python standards.
17/04/2024	Correct error in function frequencyFilter in case of band-pass filter. Modify color scales for inversion model
11/04/2024	Avoid executing certain actions (mainly zooming) when other actions (mainly related to picking) are still running. Modify code PyRefra.py to conform better to Python standards. Plot chi^2 evolution in logarithmic scale Add maximum velocity to tick numbers of color scale of final model. Save older picks from shots not actually opened to file picks.dat in order not to lose picks when opening only one or two shot files out of many.
21/03/2024	Protect against non-empty final lines when reading files shot.geo and receivers.geo
05/03/2024	Correct time gain; possibility to accept nearby picked times as new picks
28/02/2024	Modification of inversion model color scale.
26/02/2024	Modification of plotting module for compatibility with Matplotlib update.
22/02/2024	Change seg2 headers in case keywords RECEIVER_STATION_NUMBER and SOURCE_STATION_NUMBER are missing. RECEIVER… is replaced by CHANNEL_NUMBER and SOURCE… by the file number.

21/02/2024	Correction determination of file numbering
02/02/2024	Modifications for compatibility with Matplotlib v.3.8 (share axis) and replace Matplotlib rainbow colormap by colorcet rainbow4.
21/01/2024	Modify SEGY headers for exportation (compatibility with VISTA®): Shot point and geophone positions have now common numbering.
11/12/2023	Modify checking value of trigger time correction Correct delay_recording_time from ms in SEGY header to seconds needed in PyRefra Add special color scale for S-waves with cyan at 500 m/s
05/12/2023	Change dialog for color scales in tomography model, allow different color maps
04/12/2023	Allow files.prefix to be empty if file names are only numbers; Capture empty lines in *.geo
25/11/2023	Add menu option S-Model
14/07/2023	Adapt pyGIMLi sensor position definition to VSP data
12/07/2023	Add possibility to plot phase angles for multi-component data
09/07/2023	Correction of maximum plotted amplitudes after distance zoom
07/07/2023	Correct errors in case components are chosen in plotting routines and traceSign
04/07/2023	Write file with picks as function of offset with midpoint coordinates
03/07/2023	Correction of saveGimli to take into account z-coordinate for sorting
01/07/2023	Limit plot of lines for P-model to zoom extent; Capture keyboard event also in secondary, floating window ("C" for changing tomography result color scale)
30/06/2023	Integrate plots of pseudo-velocities and local slowness
27/06/2023	Correct colour scale for tomography plot (re-establish linear scale)
20/06/2023	Correct correlation picking (calculation of second derivative)
17/06/2023	Store picks automatically also after moving, uncertainty change, automatic picks; Allow cancel for correlation picking